

#### Practice Question-4

```
package handson;

public class Demoerror {
    public static void main(String[] args) {
        // TODO Auto-generated method stub
        try{
            int arr[]={10,20,30,40};
            //String str=null;
            //int num =20/0;
            //System.out.println(str.length());
            System.out.println(arr[10]);
        }
        catch(ArithmeticException e) {
            System.out.println("Erro"+e);
        }
        catch(ArrayIndexOutOfBoundsException e) {
            System.out.println("Erro:"+e);
        }
        catch(NullPointerException e) {
            System.out.println("Error:"+e);
        }
        finally {
            System.out.println("this always block exceute");
        }
        System.out.println("out of all exceptions");
    }
}
```

The screenshot shows the Eclipse IDE with a Java project. The editor displays the file `Demoerror.java` with the following code:

```
1 package handson;
2
3 public class Demoerror {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         try{
8             int arr[]={10,20,30,40};
9             //String str=null;
10            //int num =20/0;
11            //System.out.println(str.length());
12            System.out.println(arr[10]);
13        }
14        catch(ArithmeticException e) {
15            System.out.println("Erro"+e);
16        }
17        catch(ArrayIndexOutOfBoundsException e) {
18            System.out.println("Erro:"+e);
19        }
20        catch(NullPointerException e) {
21            System.out.println("Error:"+e);
22        }
23        finally {
24            System.out.println("this always block excecute");
25        }
26        System.out.println("out of all exceptions");
27    }
28 }
```

The console output at the bottom shows the execution results:

```
<terminated> Demoerror [Java Application] C:\Users\Swaroop\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.7.v20230
Erro:java.lang.ArrayIndexOutOfBoundsException: Index 10 out of bounds for length 4
this always block excecute
out of all exceptions
```